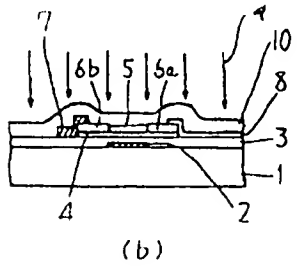
same time. Further, the semiconductor active layer 4 of a thin film transistor is an amorphous silicon film and a gate insulating film 3 is a silicon nitride film at least where it contacts the amorphous silicon film. Further, the heating is carried out at 150-230°C.



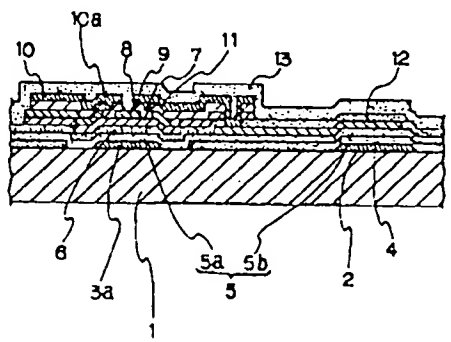
(b)

1: glass substrate, 2: gate electrode, 7: drain bus lin
8: pixel electrode, 9: short-circuit line, 10: protection fil
a: plasma light emission

(54) MATRIX TYPE DISPLAY DEVICE
(11) 5-313188 (A) (43) 26.11.1993 (19) JP
(21) Appl. No. 4-114721 (22) 7.5.1992
(71) MITSUBISHI ELECTRIC CORP (72) NAOKI NAKAGAWA(2)
(51) Int. Cl⁵. G02F1/136,G02F1/133,H01L27/12,H01L29/784

PURPOSE: To improve the insulation characteristics and display quality of a thin film transistor(TFT) LCD in a small number of processes by improving the constitution a gate insulating film and an insulating film for electric charge holding capacitance.

CONSTITUTION: At least the gate insulating films 5a and 6 or insulating films 4 and 5b for electric charge holding capacitance of a thin film transistor are formed of insulating films composed of ≧2 layers; and at least one layer of each insulating film is formed of the same material as a common-use insulating film 5 and other insulating films of plural layers are formed of gate insulating films and/or dedicated insulating films 4 and 6 matching insulating films electric charge storage capacitance.



1: transparent insulating substrate, 2: lower electrode fo
electric charge holding capacitance, 10: source electrod
line, 11: drain electrode, 12: pixel electrode, 3a: gate electrode
10a: source electrode